Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

in follicular phase, inappropriately normal ACTH and suppressed TSH while on steroids, normal free T4, low prolactin, and normal IGF-1.

The patient was initially treated with dexamethasone for COVID-19 infection then required increased dosing for pituitary apoplexy. She underwent endoscopic transnasal transsphenoidal surgery for pituitary macroadenoma with apoplexy. Pathology confirmed an infarcted hemorrhagic pituitary adenoma with CAM 5.2, synaptophysin, chromogranin. Her course was complicated by a CSF leak which required surgical repair and graft, and transient central diabetes insipidus treated with desmopressin.

Discussion: Pituitary apoplexy is a rare condition that develops when a pituitary tumor spontaneously hemorrhages or outgrows its blood supply. Symptoms include headache due to meningeal irritation, vision changes, and oculomotor palsies due to mass effect. Hormonal disturbances due to pituitary stalk compression can cause sexual problems, menstrual disturbances, galactorrhea, and fatigue. CT scan can detect a mass and rule out other hemorrhage, but MRI is more sensitive for PA. Treatment includes conservative management with steroids if there are no neurologic deficits to surgical resection for more symptomatic tumors and hormone replacement therapy.

Our patient presented with acute onset of neurological deficits and symptoms of hormone disturbances. CT scan revealed a pituitary mass, but MRI was needed to visualize hemorrhage. Clinicians should order appropriate imaging so pituitary apoplexy can be addressed in a timely manner.

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Abstract #1001080

Characteristics of Male Idiopathic Hypogonadotropic Hypogonadism (IHH) Patients; an Experience from a Developing Country

Author Block: Sajjad Ali Khan - Aga Khan university hospital, Karachi, Pakistan; SALEEM NOORALAM, Dr - Co-author, Medicine, Aga Khan University Hospital; nANIK. RAM, Dr - Co-author, Medicine, Aga Khan University Hospital; Muhammad M. Mehdi Khan, n/a - Co-author, Medicine, Aga Khan University Hospital; Zafar a. Suchal, n/a - Co-author, Medicine, Aga Khan University Hospital

Objective: Idiopathic Hypogonadotropic Hypogonadism (IHH) is a condition caused by deficiency or insensitivity to gonadotropin-releasing hormone where the pathology behind the mechanism is unknown and no secondary causes of hypogonadotropic hypogonadism are present. The condition not only affects sexual characteristic but can affect the physical and psychosocial development of a patient, therefore, making its prompt diagnoses and treatment necessary. The purpose of this study was to determine the clinical symptoms and laboratory parameters of the male IHH patients presenting in a tertiary setting.

Methods: This cross-sectional study was carried in Aga Khan University on male patients presenting with IHH to the Endocrinology clinic from December 2000 to December 2020. The patients presenting with signs or symptoms of hypogonadism, an associated low sex steroid hormone, and inappropriately low or normal gonadotropins with absent expansive hypothalamic or pituitary lesions or multiple pituitary hormone defects were included in the study. Those with a BMI < 18.5 kgm^{-2}, those who exercised > 5 hours in a week, or those with chronic illnesses were excluded from the study. Quantitative variables were shown as Mean ± Standard Deviation while qualitative variables were shown as frequency and percentages.

Results: Data of 126 IHH patients were reviewed with Mean Age ± SD being 24.2 ± 7.5 years. Clinically 94 (74.6%) presented with small genitalia, 75 (59.5%) had absent secondary sexual characteristics, 78 (61.9%) presented with infertility, 66 (52.5%) had not attained puberty, 71 (56.3%) had erectile dysfunction, 60 (47.6%) with loss of libido, 14(11.1) had a positive family history, 33 (26.3%) had gynecomastia, 17 (13.5%) had undescended testes and 8 (6.3%) had hyposmia or anosmia. The mean serum testosterone level of the patients was 26.3 ± 60 ηg/dL while mean FSH and LH level were 2.7 ± 5.0 and 1.3 ± 2.4 respectively.

Discussion/Conclusion: It was observed that the primary complaints of patients presenting with IHH were small genitalia, infertility, and absence of secondary sexual characteristics with a low serum testosterone level.

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Abstract #1001394

A Rare Endocrine Complication of the COVID-19 Vaccine

Author Block: Shirin Jaggi - Thomas Jefferson University Hospital; Serge Jabbour, MD - Co-Author, Thomas Jefferson University Hospital

Introduction: Pituitary adenomas are a common, asymptomatic finding in the general population. They are usually diagnosed incidentally on imaging studies. Rarely, pituitary adenomas can progress to pituitary apoplexy, defined as hemorrhage and/or infarction and are often associated with a triggering event.

Case Description: A 44 year old man with a history of hypogonadism presented to the hospital for fevers, chills and blurry vision that started after he received his second COVID-19 vaccine three days prior. The day following his vaccine, he initially developed subjective fevers, chills and myalgia which he self-treated with over the counter analgesics at home. Three days after the vaccine, he developed blurry vision along with change in mental status which brought him to the hospital. When he initially presented to an outside hospital, vital signs showed hypotension with MAP of 57 and fever of 103 degrees fahrenheit. MRI of the head showed a 4.7cm sellar and suprasellar mass with optic chiasm compression and left sphenoidal extension. Labs at the time showed FSH 10.5 IU/L, LH 3.3 IU/L, Prolactin 1.2 ng/mL, Cortisol 9.3 ug/dL at 5am, ACTH 7 pg/mL, TSH 2.90 uIU/mL, free T4 1.33 ng/dL and free T3 3.88 ng/dL. Due to the patient's hypotension and findings on imaging studies, there was concern for adrenal insufficiency and the patient was started on stress dose steroids. He was transferred to a tertiary care center and vitals at the time were significant for a temperature 105.9 degrees fahrenheit but otherwise hemodynamically stable. He underwent an endoscopic transsphenoidal resection of the pituitary tumor given compression of the optic chiasm. Pathology report was consistent with pituitary adenoma with focal hemorrhage and necrosis of pituitary adenoma cells. Patient currently remains on maintenance dose steroids and levothyroxine.

Discussion: Pituitary apoplexy can occur either spontaneously or due to a stressful trigger. There have been no case reports showing the novel COVID-19 vaccine leading to pituitary infarction or hemorrhage. Although the pathophysiology is not entirely clear, our patient may have developed a robust immune response that

could have potentially been a trigger leading to a pituitary apoplexy.

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Abstract #1001609

COVID-19 Response in the Cushing's Community: A Report from the Membership of the Cushing's Support & Research Foundation (CSRF), a Patient Advocacy Organization
Submitter: Leslie Edwin - Cushing's Support and Research Foundation

Author Block: Adriana G. Ioachimescu, MD, PhD, FACE - co-author, Endocrinology and Neurosurgery, Emory University Hospital; Amy Dahm, n/a - co-author, Cushing's Support & Research Foundation

Objective: Cushing's syndrome (CS) is a rare neuroendocrine disease caused by persistent, excessive cortisol secretion. Many patients suffer significant co-morbidities, and most experience delays in diagnosis and treatment. During active CS through at least the short-term post-surgical period, patients are at increased risk of infections and, frequently, poorly managed hypertension and glucose intolerance / insulin resistance. The COVID-19 pandemic thus presented this rare patient population with an unprecedented challenge to mitigate. We examined self-reported pandemic-related behaviors of CS patients who are members of the US-based patient advocacy organization Cushing's Support & Research Foundation (CSRF).
Methods: An online survey analyzing behaviors related to CS status, adverse effects of quarantine, and adaptive measures engaged as a result of the COVID-19 pandemic was designed and shared with members of CSRF.
Results: Of 274 total responses, 91.2% (n=250) of members indicated that they had not become infected with COVID-19 as of the time of survey completion, whereas 8.8% (n=24) had caught the virus. The majority of respondents (78.5%, n=215) are post-surgical and in remission; the remaining 21.5% (n=59) are experiencing recurrence, diagnosed but not yet treated, or still in the diagnostic phase. About two-thirds of respondents (66.4%, n=182) reported making changes to their routine immediately or within the first week of hearing about the pandemic. Most (89.8%, n=246) have habitually worn a mask throughout 2020 and into 2021, but in some cases it has taken adverse experiences to alter behaviors. Among the patients diagnosed with COVID, five reported not wearing a mask before getting the virus, but four of those began wearing a mask after getting infected with the virus. Some patients reported postponing labs (38.7%, n=106), postponing MRIs or other radiology appointments (21.2%, n=58), and testing for the virus (13.5%, n=37) based solely on concern for potential increased risk of infection / severity of infection due to their history with CS. About a third of respondents (34.7%, n=95) also have temporary or permanent adrenal insufficiency (AI) due to CS, and a notable 38.9% (n=37) of these patients reported shortages of their regular cortisol-replacement medication at their regular pharmacy. Changing dosage and/or cutting pills is another response to shortages reported by 13.7% (n=13) of those experiencing AI.
Discussion/Conclusion: Quarantine restrictions are at times extreme and difficult to manage. Rare disease patients such as those with CS already adapt their conditions daily to a world that often doesn't readily support or understand those adaptations. The results of this survey confirm that the added stress and uncertainty of adjusting further to the restrictions of quarantine have added significant burden to these patients. Social isolation and postponement of needed tests and procedures in particular have contributed to a decreased quality of life for CS patients during the COVID-19 pandemic.

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Abstract #1002103

A Rare Case of Pituicytoma

Author Block: Pushyami Mikkilineni, MD - Primary author, Henry Ford Hospital; Simon Rebecca, DO - Co-author, Henry Ford Hospital

Introduction: Pituicytoma is a rare, low grade glioma arising from pituicytes of the posterior pituitary. It presents as a suprasellar mass and is often difficult to distinguish from pituitary adenomas. Diagnosis is based on histopathology, positive staining for thyroid transcription factor 1 (TTF-1).Surgical resection is the main stay of treatment. We are reporting this case of pituicytoma to add to current literature for future research and better understanding
Case Description: We report a 42-year-old female with headaches and galactorrhea. MRI brain revealed 10X11.1X10.7 mm enhancing lesion within the suprasellar cistern posteriorly causing mass effect of the optic chiasm and involving the pituitary stalk. Hormonal assay showed elevated prolactin level, 45.1 ng/ml (reference range < 27 ng/ml). TSH, cortisol, FSH,LH,ACTH, and IGF-1 levels were normal. Humphrey's visual field testing was normal. She underwent craniotomy with radical subtotal resection of the lesion due to progressive symptoms and increase in size of suprasellar mass on repeat imaging. Postoperative course was complicated by triphasic diabetes insipidus and hypopituitarism.
Discussion: Pituicytoma is a rare, low-grade glioma which arise in the posterior pituitary. So far 120 cases were described in the literature. It is commonly seen in adults, with mean age of 46.9 years at the time of diagnosis. The most common clinical presentation is headache and bitemporal hemianopsia. Panhypopituitarism and hyperprolactinemia frequently occur. Only 5% of cases presented with diabetes insipidus. Common histological features include rounded to spindled nuclei, eosinophilic cytoplasm, and minimal mitotic activity. TTF 1 is the most reliable immunostain. Surgical resection is the mainstay of treatment. Total resection can be difficult due to highly vascular nature of these tumors and their potential for infiltration. Some authors recommend craniotomy due to the vascularity, and adherence of tumor to surrounding structures. The role of radiotherapy in the management of pituicytoma is well established. It should be performed if the tumor is not surgically resectable and increases in size. Tumor recurrence is 29.2% in incomplete resections and current treatment is repeat surgery in curative intention or radiation therapy. However, repeat surgery poses significant risks and may even lead to fatal outcome. As the majority of tumors are not completely resectable and recurrence after partial removal is high, targeted therapies may be a possible option in the future. The most common postoperative complications are diabetes insipidus, hypopituitarism, visual impairment, and hypothyroidism. These complications were thought to be secondary to iatrogenic trauma to contiguous structures. Our patient underwent craniotomy and subtotal resection of tumor. Histopathology revealed low grade glioma with spindle cell morphology and fascicular pattern with diffuse TTF − 1positivity consistent with pituicytoma. Postoperative course was complicated by triphasic diabetes insipidus treated with desmopressin as well as